

# **SHIFT838 Newsletter**

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## Welcome to the first SHIFT838 Newsletter!

I wanted to create a new resource for the TI-99/4A and GENEVE 9640 computers and decided to create a newsletter to spread the word and keep fellow TI/GENEVE users updated.

A little about myself. I have been dedicated to the TI-99/4A since 1983 when I first discovered this computer as being introduced by a friend of mine, Chris Allen. I took to the TI like a fish to water and was able to talk my parents into purchasing various expansions. I live and work in the Houston, TX area and thanks to my parents supporting my TI habit when I was young I have been able to have a very successful career in Information Technology and currently work for a major Oil and Gas company in the area.

In 1984 I was able to obtain a copy of the S.O.F.T.W.O.R.X BBS code from Mark Shields and launch a BBS called USS Valiant ][, which was a sister board to 'The USS Enterprise' BBS that Mark operated. I did modify the code to some extent to support RLE graphic files, but a majority of his code was already very lean and worked great.

# **Software**

## **Extended Basic v2.7 Suite by Tony Knerr**

This cartridge is new for 2014 and I must say is a must have for all TI'ers. The cartridge itself contains 120k of GROM and 512k of ROM memory.

The amount of useful utilities and games on this cartridge will help the average to advanced TI user. With the number of programs this will decrease the amount of cartridge swapping and will cause less cartridge port wear. I have not had to swap this cartridge out of my port in months.

The cartridge also has a built in jumper set to allow the installation of a reset switch, which adds to the cartridge's abilities. Instead of flipping the power, just simply tap the reset switch. The switch required is a standard momentary switch in the normally closed position. Please note the cartridges I have seen are not sold with the reset switch, but can easily be added later.

Extended Basic v2.7 itself has quite a few new enhancements and routines. It is also 100% compatible with the TI Extended Basic routines along with added benefits for:

Text mode display
Formatting diskettes from XB v2.7
Help file within XB v2.7
Image File Loading within XB v2.7 (EA Option #5 - #6 on this cart)
XXB (Barry Traver's XXB Version 1.5 can be loaded)

These are just a few highlights of the cartridges abilities.

This cartridge has quite a few must have cartridges in my opinion.

Extended Basic v2.7 TI Writer/Assembler (TI Writer and Editor Assembler in one) Disk Manager 2 (modified version) Archiver 4 (Support for Hard Drives)

And if you have a NanoPEB or CF7+; then Compact Flash HDXS!

Another good benefit of this cartridge is that any program on the cartridge can be called and ran directly from Basic or XB v2.7 in the format of:

CALL ARC4 [Runs Archiver 4]

The loaded programs can also be called from within a running program in the format of:

RUN "ARC4" [Runs Archiver 4]

The amount of work that was involved in this cartridge and the usefulness just shows how much dedication and support that our little machine still has.

In my opinion this one cartridge easily replaces other hardware like the PGRAM+ card, with the exception of the Real Time Clock that was on the PGRAM+, but most of the TI Users would never need to use the RTC anyway.

I must say 'THANK YOU TONY!'

#### **MDOS for Geneve 9640**

The latest stable production version of MDOS is version 6.50, however there is a 6.70 Release Candidate 2 that is up for downloads on the Geneve9640 Yahoo List group. Please remember in order to run MDOS 6.0 or higher a 32k SRAM upgrade must be done to the Geneve. Instructions of the project can be found on the mainbyte.com website.

MDOS or Myarc Disk Operating System was originally designed by Paul Charlton. This system is very similar to IBM DOS and MS DOS but was specifically written for the Myarc Geneve 9640 computer.

#### **CHARDEF-99 V1.1**

This software is written to be used on a Windows PC to help support the TI-99/4A, both legacy hardware and emulation. Specifically for helping a programmer easily get the hexadecimal value of a new character definition to be used within any version of Extended Basic.

This program was thought up by me when I was working on coding of my BBS (FuSiON BBS). I needed to change some character definitions and working through the XB reference area for CALL CHAR seemed to me that it may be difficult for some users to understand or take time to decipher, so CHARDEF-99 was born.

This program is very simply to use and has been tested on Windows XP, Vista, 7 and 8 on all 32bit and 64bit versions.

The program shows 64 blocks that represent the entire character mapping. Click to enable/disable each block to make the graphic desired and click 'Generate', the program then displays the hex value to be used in the program.

This can be downloaded from my site: http://shift838.wix.com/shift838

## **BBSing**

As we all know there seems to be less and less BBS' running every month. BBS' brings back so many memories for all of us as we remember getting a modem for the first time on our TI systems and connecting via 300 baud and thinking that was fast.

How many countless hours did us all spend trading files and posting messages on these BBS'? For me I know it was quite a few hours as well as running my own BBS at the time (USS Valiant ][ - Yes I liked Star Trek, didn't we all?)

There still are of course BBS' that support the TI and Geneve computers today (2 to be exact right now). Both of these BBS' run S&T BBS software, which is very powerful BBS software that supports multiple baud rates and transfer protocols as well as ANSI graphics and 80 columns.

S&T was coded by Tim Tesch and is often updated still to this day. As anyone that has coded any type of program knows how much time can be dedicated to finishing a product and this was no easy or short tasks.

Today the two BBS' that support the TI and Geneve computers are:

Heatwave BBS, which is accessible via dialup and via telnet. This system is run on a Geneve 9640 computer and is based in Arizona.

Telnet to: www.heatwavebbs.com port 23 Dialup: 602-955-4491 @ 8-N-1

The Hidden Reef, which is accessible via dialup only currently. This system is run on a TI-99/4A modified system and is based in New York.

Dialup: 772-600-0562 @ 8-N-1

Last information I had from the SysOp of 'The Hidden Reef' BBS is that he was looking into making his BBS accessible via Telnet.

Please login to both of these great BBS' if you have not already and show your support.

## **New Projects Coming**

I have taken it upon myself to revive some older BBS software that has not been able to find.

- FuSiON BBS New BBS coded by me (XB code) and utilizing Tim Tesch's S&T machine code. (Permission obtained); this is just a different design and look and feel from a Sysop perspective. Supports many of the features that are available in S&T. - Will be posted on the FTP site. Updates can be seen on the project at http://www.sourceforge.net/projects/fusionbbs
- S.O.F.T.W.O.R.X. version 1.x; this BBS program was originally coded by Mark Shields using Brian Wilcutt's Zyolog BBS machine language. Currently working on the documentation and will be posting to the FTP site soon. See resources below.
- 3. S.O.F.T.W.O.R.X. Latest Version This is a huge version step from version 1.0, which offers the same Zyolog machine language but a complete re-code of the BBS.
  - a. This is requiring a lot more work as there are a lot of files I have to recreate to get the BBS to function.

#### **Emulation**

There are a lot of TI/Geneve users that have gone complete emulation and no longer use their hardware or have already re-homed their hardware.

There are various emulators out there that work very well. I wanted to take the time to list a few so that some of the users of these systems both new and seasoned are aware of these. As I have been contacted with new users of the TI, yes I said NEW. These users are looking for not always original legacy hardware, but other avenues to learn the TI/Geneve.

#### Classic99

Available from Harmlesslion Software which runs off a Windows environment and emulates the TI-99/4A home computer. Support for V9T9 and .DSK image as well as FIAD files. Supports various hardware emulations for the system. A very well written and easy to use emulator. No install required.

#### <u> Win994A</u>

Written by Cory Burr and runs within a Windows environment. This product does a fairly well job of simulating the TI-99/4A. Support for floppy disk drives as well as Hard Disk images. Well written and easy to use as well, however this application does require an installation within Windows.

#### **MESS (Multi Emulator Super System)**

Mess is a port of MAME and requires MAME to be installed first on your system. The TI-99/4A and Geneve sections of Mess is authored by Michael Zapf and is a very versatile emulator. MESS also supports other systems as well. This emulator by my opinion has the most options for various hardware that can be emulated.

I have also used MESS in conjunction with Michael Zapfs TIIMAGETOOL program, which allows MESS to communicate directly with the PC communications port and within the MESS emulation of the RS232 card, which allows the MESS emulated system to access the serial port to dial through the emulator on a modem or other serial device like the Lantronix UDS devices.

This has helped me code my FuSiON BBS to be compatible with this emulator. A definite plus. This could potentially increase the number of TI/Geneve supported BBS' out there. The only drawback is with the DCD signal and DTR signal. I have not been able to successfully disconnect a user from the BBS with the typical style of dropping the DTR signal or issuing an ATH command. Also detecting a carrier is different within the MESS emulator to get it to function correctly which with help from Tim Tesch has been resolved. Of course before I had an actual HAYES modem back when I was running my Zyolog based BBS I could not disconnect users anyway.

Please note that Emulators and Simulators are never 100% compatible to the original system you are trying to emulator but they usually work fairly well for what is needed.

## Coding

## Text To Speech

A simple Text To Speech program that takes the text you input and speaks it on the TI-99/4a. Requirements: Terminal Emulator II cartridge and Speech Synthesizer

100 OPEN #1:"SPEECH",OUTPUT 110 CALL CLEAR 120 INPUT A\$ 130 PRINT #1:A\$ 140 GOTO 110 A small routine to demonstrate the CALL SOUND for multiple tones/noise on the TI-99/4A. This is for all you Star Trek fans. I use the below for my SysOp page on my BBS program. The thanks needs to go to Mark Shields that coded the USS Enterprise as he did this routine back in the 1980's.

100 CALL SOUND(1250,1760,0,1762,0) 110 CALL SOUND(1250,1760,0,1319,0,1321,0) 120 CALL SOUND(1250,1760,7,1319,4,1568,0) 130 CALL SOUND(1250,1319,7,1568,3,988,0)



#### Resources

#### **Contact information**

To contact me please feel free to visit my website and click on the 'Contact' tab.

http://shift838.wix.com/shift838

## **Newsletter Topics**

If you would like to participate in the writing of this newsletter or provide any topics for this newsletter please contact me via my web site.

#### **Sites**

Below resources are just a handful of sites that support the TI-99/4A and/or Geneve 9640 computers. It is in no way a full list. This section will be included in all future newsletters. If there is a site that you think should be mentioned then please contact me.

Web sites / FTP Sites

http://www.99er.net

ftp://ftp.whtech.com

http://shift838.wix.com/shift838

http://www.ti99-geek.nl/

http://www.mainbyte.com

http://www.atariage.com

http://www.harmlesslion.com

Yahoo List Groups:

https://groups.yahoo.com/neo/groups/TI99-4A/info

https://groups.yahoo.com/neo/groups/TI994A/info

https://groups.yahoo.com/neo/groups/Geneve9640/info

https://groups.yahoo.com/neo/groups/turboforth/info

